

Project File MEMO

DATE: November 5, 2018

TO: Project File

FROM: William Brock,
FOREST FISH PROGRAM MGR.

/s/ William Brock

Nov 5, 2018

Signature

Date

SUBJECT: Fisheries Report: Musser Homestead Fuels Reduction Project

PROJECT DESCRIPTION:

The purpose of this Project is to “create an area that increases suppression capability and protects infrastructure within the Wildland Urban Interface (WUI) as well as reducing the potential for fire to escape private lands onto National Forest System lands” (Decision Memo, DM).

Conifers less than 10 inches in diameter would be thinned and removed. Fuels would either be chipped or piled and burned in the winter months. There is a high load of dead and downed material both naturally occurring and activity-created that is in excess of 35 tons/acre adjacent to the Musser trailhead area.

The Project proposes to reduce fuel loading and vegetation on National Forest system lands adjacent to private property in the East Weaver Creek area, northeast of Weaverville, CA. There is a need to reduce surface and ladder fuels that lead to high intensity fire (measured by flame lengths) within the project area. Treatments are designed to improve the connectivity and effectiveness of past projects and defensible space on private lands. Desired future conditions from the project would:

- Provide for firefighter and public safety,
- Mitigate risk to communities and infrastructure,
- Increase fire suppression capabilities,
- Improve vegetation resilience

Proposed actions would defuse potential fire behavior in the planning area that results in low flame lengths, averaging 4 feet or less, and limited crown fire potential during 90th percentile weather conditions. This will provide safer conditions for local residents and firefighters during a wildfire and increase the likelihood of success of fire suppression operations by allowing them to utilize direct attack methods. There is also a need to improve the residual growth and vigor by reducing competition within the stand. Less vegetative competition will allow remaining trees to grow faster and accelerate the development of more fire-resistant boles and crowns.

The project proposes to treat approximately 51 acres. Treatments include manually thinning conifers, hardwoods, and brush, and pruning leave trees. Activity and existing surface fuels will be removed

through either chipping or prescribed burning or a combination of the two. Hazard trees would be cut if they have potential to strike private property or pose a threat to the Weaver Basin Trail system. Hand piling and maintenance burning will occur as fuel conditions dictate.

The surrounding National Forest System lands have had multiple treatments take place already. Past fuels treatments within the area include the Croften Wildlife Enhancement thin, cut, pile, and burn project located to the south; the Musser Hill Wildlife Enhancement broadcast burn located to the north; the Brown's Timber Sale and Musser FMZ to the east, and the Five Cent mastication and Five Cent Wildlife Enhancement broadcast burn to the west.

A thorough description of the project can be found in the "Decision Memo – Musser Homestead Fuels Reduction Project". The action is categorically excluded from further documentation via NEPA by means of category "36 CFR 220.6(e) (6) - Timber and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction".

Several potential extraordinary circumstances that could drive NEPA analysis were found to not apply to this Project, therefore allowing for the CE to proceed.

One of the potential extraordinary circumstances that could have conceivably justified further analysis is stated in the DM as follows:

- Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species

This particular criteria will be analyzed below regarding federally listed fish or fish critical habitat, Forest Service Sensitive fish, Management Indicator Species Fish, or Essential Fish Habitat.

Federally listed Fish, Fish Critical Habitat, Essential Fish Habitat, Management Indicator Species Fish, and USFS Sensitive Fish

ESA Species Considered:	Southern Oregon/Northern California Coasts (SONCC) Coho Salmon; Threatened
ESA Critical Habitat:	SONCC Coho Salmon Critical Habitat
Essential Fish Habitat:	Coho and Chinook Salmon
USFS Sensitive Species:	Upper Trinity River (UTR) Chinook Salmon-fall run Klamath Mountain Province (KMP) Steelhead Pacific Lamprey

Management Indicator Fishes:

Winter-run steelhead, spring-run Chinook Salmon,
Summer Steelhead, Rainbow Trout

Description of Listed Fishes, Other Fishes and Habitat Descriptions

1. Endangered Species Act Listed Fishes

A. SONCC Coho Salmon and Coho Salmon Critical Habitat.

SONCC coho salmon (*Oncorhynchus kisutch*) were listed under the ESA as Threatened in 1997 (62 FR 24588; May 6, 1997) and Critical Habitat (CH) was designated in 1999 (64 FR 24049; May 5, 1999). Designated CH for SONCC coho salmon encompasses reaches of all rivers (including the Klamath River basin, estuarine areas, and tributaries) extending from the Mattole River in California to the Elk River in Oregon, inclusive. Coho salmon CH includes the entire mainstem Trinity River starting with the confluence with the Klamath River upstream 109 miles to the base of Lewiston Dam as well as most of the mainstems of the South Fork Trinity River and Hayfork Creek.

2. Essential Fish Habitat

In addition to CH designations for the fishes listed above, Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Act (MSA) require heightened consideration of habitat for commercial fish species in resource management decisions, including EFH for SONCC coho salmon and UKT Rivers Chinook salmon. EFH is defined in section 3 of the MSA as “those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity.” National Marine Fisheries Service (NMFS) interprets EFH to include aquatic areas and their associated physical, chemical and biological properties used by fish that are necessary to support a sustainable fishery and the contribution of the managed species to a healthy ecosystem. The MSA and its implementing regulations at 50 CFR 600.92(j) require that before a federal agency may authorize, fund or carry out any action that may adversely affect EFH, it must consult with NMFS. The purpose of the consultation is to develop conservation recommendations that address reasonably foreseeable adverse effects to EFH. Freshwater EFH for Pacific salmonids includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically, accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers, and long-standing impassable natural barriers. Analysis of CH or any anadromous fish habitat will include concurrent analysis of EFH.

3. Forest Service Sensitive Species

The list of Shasta-Trinity National Forest Trinity River Basin Sensitive fish species seen above was considered for this analysis. The determination criteria is the potential for project activities to cause a trend toward federal listing (under the Endangered Species Act). Activities that may affect

a species or its habitat, but are not likely to cause significant disruption to reproductive success on the part of individuals or patterns of reproductive success on the part of larger populations, will not affect the demographic patterns of the species and will not cause a trend toward federal listing. Although individuals may be affected, federal listing is considered at a population level.

4. Management Indicator Assemblages and Fishes

From the STNF's Land and Resource Management Plan (1995): "Fish species have been grouped into specific assemblages to simplify tracking the effects of Forest Service management activities on fish habitats. Three assemblages have been established. These are: (1) Fish Habitat – Anadromous Assemblage, (2) Fish Habitat – Inland Cold Water Assemblage, and (3) Fish Habitat – Inland Warm water Assemblage. Winter-run Steelhead, spring-run Chinook salmon and summer steelhead were selected as management indicators for the anadromous fish assemblage. The rainbow trout was selected for the inland cold water fish assemblage." The Project's Action Area includes assemblages numbered one and two.

Analysis of Potential Project Effects to the Fishes and Habitats Listed Above

The Proposed Action Project boundary is not far from the riparian corridor of East Weaver Creek. A tributary on the northern portion of the Project drains into East Weaver Creek from the northeast. In fact, 0.47 acres of the project area includes riparian reserve of that unnamed intermittent tributary. See the Project area map in other resource reports.

The Project will be assessed for potential effects to the habitat indicators listed in Table 1. See the Analytical Process Guidance document (AP, 2004) for a description of each indicator.

The potential effects to the Indicators by the Project will be analyzed using the three factors of proximity, probability, and magnitude, and if needed by the additional factors of distribution, frequency, duration, timing, and nature. Direct and indirect effects will be considered.

The only indicators listed in Table 1 that could conceivably be affected during and after and/or directly or indirectly by project implementation, would be Suspended Sediment/Turbidity and Substrate/Embeddedness. But this potential will be reduced or eliminated by resource protection measures (RPMs) incorporated into the Project implementation along with best management practices (BMPs) applicable to the Project.

The numerous specific techniques for project implementation are listed in the Decision Memo. Several erosion prevention and control measures in the form of BMPs are listed in the Project Hydrology Report, along with specific Aquatic Management Zone RPMs that would apply to any activities taken in the 0.47 acres of Project territory that comprises riparian reserve on the northern edge of the Project boundary.

Additional assurances were relayed via direct communication with Tim Richey, Project fuels and fire management officer, on November 1, 2018. As stated by Tim:

“The lower portion of the project along East Weaver Creek Road will be thinned and piled/ burned. The seasonal stream on the north edge of the project should not need any work, and if it did we could pull the small material out to a pile. For the maintenance burning, the risk of higher severity fire that would lead to sedimentation should be reduced by the pretreatment pile burning and through prescriptions in the burn plan. We will also maintain 50% fine soil cover as directed by our RPMs.”

The implementation techniques combined with the sum of Project RPMs and BMPs reduces or eliminates the potential for project generated sediment from reaching East Weaver Creek or the unnamed small intermittent tributary along the northern edge of the Project boundary. Although the concept of proximity of project activities to East Weaver Creek cannot specifically be used as a criteria for dismissal of potential sedimentation, the probability of harmful Project products being delivered to East Weaver Creek in a sufficient magnitude to cause any adverse effects to coho salmon or coho salmon critical habitat is essentially nil.

For all of the reasons stated above and taken together, the Project will have no effect to coho salmon or coho salmon critical habitat. The Hydrology Report concludes that there is no Sediment Discharge Potential so there will be no logical means by which the Proposed Action could affect the fish or habitats listed above via sediment, or the other Indicators listed below.

The summarized effects to habitat indicators itemized in the Analytical Process for Developing Biological Assessments for Federal Actions Affecting Fish within the Northwest Plan Area (2004) follows as Table 1, below. A ‘zero’ (0) determination represents a no effect conclusion or a neutral effect condition as a result of implementing this project.

Table 1. Effects to Habitat Indicators by the Musser Fuels Project to SONCC
Coho Salmon and their Critical Habitat

Indicator	Musser Homestead Fuels Reduction Project
Temperature	0
Suspended Sediment / Turbidity	0
Chemical Contamination / Nutrients	0
Physical Barriers	0
Substrates / Embeddedness	0

Large Woody Debris	0
Pool Frequency and Quality	0
Large Pools	0
Off-channel Habitat	0
Refugia	0
Average Wetted Width / Maximum Depth pools	0
Streambank Condition	0
Floodplain Connectivity	0
Peak/Base Flows	0
Drainage Network	0
Road Density/Location	0
Disturbance History	0
Riparian Reserves	0

Note: 0= Neutral or No Effect

There will be no direct or indirect effects to the fish or fish habitats listed in this report. A trend toward ESA listing or loss of viability of the three Forest Service Sensitive Species listed on the USFS Regional Sensitive Species List for the Shasta Trinity National Forest and in this document is not anticipated and viability is not at risk. The Project does not adversely modify their habitat in the short or long term. Individual anadromous salmonids are not expected to be adversely impacted by the Project. The Project will have zero effect to the four MIS fish species that could conceivably occur adjacent to or downstream from the proposed Project area. The project will have no effect on salmon EFH. Implementation of the Project will not prevent attainment of the Aquatic Conservation Strategy Objectives (NWFP ROD 1994) as per the Hydrology Review Project File Memo and the evidence presented above.

Literature Cited

USDA Forest Service, US Department of Commerce, US Department of the Interior-USFWS and BLM (USDA-USDC-USDI). 2004. Analytical Process for Developing Biological Assessments for Federal Actions Affecting Fish within the Northwest Forest Plan Area.

USDA Forest Service Shasta Trinity National Forest, Hydrology Review Project File Report 2018.

USDA Forest Service; USDI Bureau of Land Management. 1994. Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl; Standards and Guidelines for Management of Habitat for Late-successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl. Northwest Forest Plan ROD.

USDA Forest Service, 1995. Shasta-Trinity National Forest Land and Resource Management Plan.